

OCT 16 2006

Appl. No. 10/770,737
Reply to Final office action of July 14, 2008

REMARKS

This is intended as a full and complete response to the Final Office Action dated October 4, 2006, having a shortened statutory period for response set to expire on January 4, 2006. Please reconsider the claims pending in the application for reasons discussed below.

After entry of this response, claims 21-24, and 26-28 remain pending in the application and are shown above. Claims 21-28 are rejected by the Examiner. Applicants have canceled claims 1-3, 5, 6, and 9. Reconsideration of the claims is requested for reasons presented below.

Claim Rejections – 35 USC § 102

Claims 1-3, 5, 6, and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by *Dordi et al.* 6,267,853. In response, Applicants have canceled claims 1-3, 5, 6, and 9, thereby obviating the rejection. Accordingly, Applicants respectfully request withdrawal of this rejection.

Claims 21, 23, 24, and 26-28 are rejected under 35 U.S.C. 102(e) as being anticipated by *Hongo et al.* 6,921,466. Applicants respectfully traverse the rejection.

Hongo et al. does not teach, show, or suggest that *each* of the at least two substrate processing modules in detachable communication with the factory interface includes a pretreatment/post treatment cell *and* an electroless processing cell as recited in independent claim 21. In other words, each interchangeable (*detachable*) unit of *Hongo* does not include both a pretreatment/post treatment cell *and* an electroless processing cell. Rather, *Hongo* teaches that there may be an interchangeable (*detachable*) electroless plating unit, such as a seed layer forming unit, and a separate interchangeable (*detachable*) cleaning unit (col. 5, lines 4-5, 21-27, and 59-65). Again with regard to FIG. 31, *Hongo* teaches a separate electroless Cu plating unit (seed layer forming unit 112) or electroless Ru plating unit (barrier layer forming unit 111) and a separate cleaning unit 115 or 118, wherein the units (plating, cleaning, annealing, and the like) may be interchangeable (col. 33, line 59 to col. 34, line 15).

Appl. No. 10/770,737
Reply to Final office action of July 14, 2008

With regard to Figures 36 and 45 as pointed out by the Examiner, *Hongo* teaches that the interchangeable (detachable) electroless plating unit 112 may perform plating and cleaning operations without transferring the substrate (col. 37, lines 30-65 and col. 49, lines 10-33), but this teaches away from the module in detachable communication with the factory interface including a pretreatment/post treatment cell and an electroless processing cell. On the other hand and with regard to Figure 37 as pointed out by the Examiner, *Hongo* does indeed teach an embodiment of an interchangeable (detachable) cleaning unit 116 as shown in Figure 31 (col. 38, lines 11-12) *separate* from the interchangeable (detachable) electroless plating unit 112 of Fig. 31 and embodied in Figure 36, but this separation of units supports Applicants' position. *Hongo* does not teach that an interchangeable unit (a module in detachable communication as recited in claim 21) includes both a pretreatment/post treatment cell *and* an electroless processing cell. In other words, there are not two cells in any of *Hongo*'s interchangeable units.

Thus, *Hongo* does not anticipate or suggest claims 21, 23, 24, and 26-28. Accordingly, Applicants submit that independent claim 21, as well as those claims that depend therefrom, are allowable and respectfully request withdrawal of this rejection.

Claim Rejections – 35 USC § 103

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Dordi et al.* 6,267,853 in view of *Davis* 5,779,799. In response, Applicants have canceled claim 9, thereby obviating the rejection. Accordingly, Applicants respectfully request withdrawal of this rejection.

Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Hongo et al.* 6,921,466 in view of *Verhaverbeke et al.* 2003/0045098. Applicants respectfully traverse the rejection.

Hongo et al. in view of *Verhaverbeke et al.* does not teach, show, or suggest that *each* of the at least two substrate processing modules in detachable communication with the factory interface includes a pretreatment/post treatment cell *and* an electroless

Appl. No. 10/770,737
Reply to Final office action of July 14, 2008

above. Accordingly, Applicants submit that claim 22, which depends on the allowable claim 21, is patentable over *Hongo et al.* in view of *Verhaverbeke et al.* and respectfully request withdrawal of this rejection.

RECEIVED
CENTRAL FAX CENTER

→ USPTO

008/008

OCT 16 2006

Appl. No. 10/770,737
Reply to Final office action of July 14, 2006**Conclusion**

The references cited by the Examiner, alone or in combination, do not teach, show or suggest the invention as claimed.

Having addressed all issues set out in the office action, Applicants respectfully submit that the claims are in condition for allowance and respectfully request that the claims be allowed.

Respectfully submitted,



Keith M. Tackett,
Registration No. 32,008
PATTERSON & SHERIDAN, L.L.P.
3040 Post Oak Blvd. Suite 1500
Houston, TX 77056
Telephone: (713) 623-4844
Facsimile: (713) 623-4846
Attorney for Applicant(s)